

Case/Application number: **10596086** PALM

Priority App. Filing Date:

Format for Search Results: **SCORE**

Meaning of unusual acronyms or initialisms:

Identify the novelty:

Additional Comments:

**Search compounds of claim 4, including where the benzene substituent can be in any position, any free position can have lower alkyl, and any lower alkyl can be hydrogen.**

=> fil hcaplu  
FILE 'HCAPLUS' ENTERED AT 14:44:45 ON 05 JAN 2010  
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FILE COVERS 1907 - 5 Jan 2010 VOL 152 ISS 2  
FILE LAST UPDATED: 4 Jan 2010 (20100104/ED)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2009  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2009

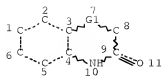
HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d stat que l14  
L1 STR



VAR G1=CH/N

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

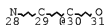
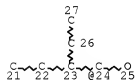
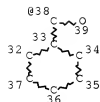
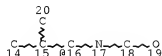
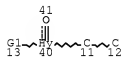
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NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE

L3 127284 SEA FILE=REGISTRY SSS FUL L1

L6 STR



VAR G1=16/24/30/38

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

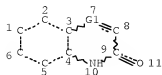
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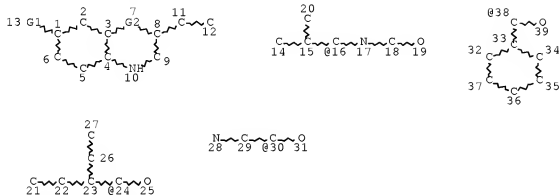


VAR G1=CH/N

NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

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 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE  
 L11 87 SEA FILE=REGISTRY SUB=L3 SSS FUL L6 AND L9  
 L12 STR



VAR G1=16/24/30/38  
 VAR G2=CH/N  
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 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
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 NUMBER OF NODES IS 39

STEREO ATTRIBUTES: NONE  
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L14 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2010 ACS ON STN  
 ACCESSION NUMBER: 2007:1452342 HCAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 148:158850  
 TITLE: Comparative Molecular Field Analysis of quinoline derivatives as selective and noncompetitive mGluR1 antagonists  
 AUTHOR(S): Sekhar, Y. Nataraja; Nayana, M. Ravi Shashi; Ravikumar, Muttineni; Mahmood, S. k.  
 CORPORATE SOURCE: Bioinformatics Division, Department of Environmental Microbiology, Osmania University, Hyderabad, India  
 SOURCE: Chemical Biology & Drug Design (2007), 70(6), 511-519  
 CODEN: CBDDAL; ISSN: 1747-0277  
 PUBLISHER: Blackwell Publishing Ltd.

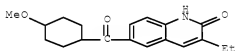
DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB A 3D-QSAR Comparative Mol. Field Anal. (Co-MFA) of 45 quinoline derivs. as metabotropic glutamate receptor subtype 1 (mGluR1) inhibitors was investigated. The Co-MFA anal. provided a model with  $q^2$  value of 0.827 and  $r^2$  value of 0.990, in which  $q^2$  value of 0.827 and an  $r^2$  value of 0.990, in which the good correlation between the inhibitory activities and the steric and electrostatic mol. field around the analogs was observed. The predictive ability of the models was validated using the set of 12 compds. that were not included in the training set of 33 compds. These results provided further understanding of the relationship between the structural features of quinolone derivs. and its activities, which should be applicable to design and find new potential mGluR1 inhibitors.

IT 1003022-60-3  
 RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (comparative mol. field anal. of quinoline derivs. as selective and noncompetitive mGluR1 antagonists)

RN 1003022-60-3 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2010 ACS ON STN

ACCESSION NUMBER: 2005:567163 HCAPLUS Full-text

DOCUMENT NUMBER: 143:78213

TITLE: Preparation of cyclohexylalkyl quinolinone and quinoxalinone derivatives as poly(ADP-ribose) polymerase (PARP) inhibitors

INVENTOR(S): Mabire, Dominique Jean-Pierre; Van Dun, Jacobus Alphonsus Josephus; Somers, Maria Victorina Francisca; Wouters, Walter Boudewijn Leopold

PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.

SOURCE: PCT Int. Appl., 59 pp.  
 CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005058843	A1	20050630	WO 2004-EP13165	20041118
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,			

NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,  
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO,  
 SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,  
 NE, SN, TD, TG

AU 2004299183 A1 20050630 AU 2004-299183 20041118  
 CA 2548273 A1 20050630 CA 2004-2548273 20041118  
 EP 1694653 A1 20060830 EP 2004-803192 20041118  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
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 HR, IS, YU

CN 1890225 A 20070103 CN 2004-80036656 20041118  
 BR 2004017571 A 20070320 BR 2004-17571 20041118  
 JP 2007513898 T 20070531 JP 2006-543409 20041118  
 SG 151250 A1 20090430 SG 2009-1548 20041118  
 US 20090042881 A1 20090212 US 2006-596083 20060530  
 MX 2006006573 A 20060731 MX 2006-6573 20060609  
 IN 2006DN03331 A 20070824 IN 2006-DN3331 20060609  
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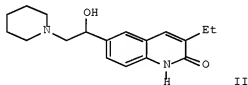
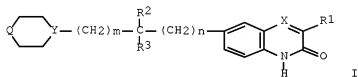
PRIORITY APPLN. INFO.:

EP 2003-78918 A 20031210  
 WO 2004-EP13165 W 20041118

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 143:78213; MARPAT 143:78213

GI



AB Title compds. I [ $n = 0-1$ ;  $m = 0-1$ ;  $X = N, CR_4$ ;  $Y = N, CH$ ;  $Q = NH, O, CO$ , etc.;  $R_1 =$  alkyl, thienyl;  $R_2 = H$  or together with  $R_3$  may form  $O$ ;  $R_3 = H$ , alkyl, OH, etc. or  $R_3 = (CH_2)_pZ$ ;  $R_4 = H$  or together with  $R_1$  may form  $(CH=CH)_2$ ;  $p = 0-2$ ;  $Z =$  (un)substituted heterocycle] and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of poly(ADP-ribose) polymerase (PARP). Thus, e.g., II was prepared by reaction of 3-ethyl-2(1H)-quinolinone with chloro-acetyl chloride followed by coupling with piperidine and subsequent reduction. The inhibitory activity of I towards PARP-1 was evaluated in scintillation proximity assays and in filtration assays and it was revealed that compds. of the invention

displayed inhibitory activity at initial test concns. of  $10^{-6}$  and  $10^{-5}$  M, resp. I as inhibitors of poly(ADP-ribose) polymerase should prove useful in the treatment of PARP-1 mediated disorders. Pharmaceutical compns. comprising I are disclosed.

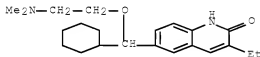
IT 855444-04-1P

RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(preparation of cyclohexylalkyl quinolinone and quinoxalinone derivs. as poly(ADP-ribose) polymerase (PARP) inhibitors)

RN 855444-04-1 HCAPLUS

CN 2(1H)-Quinolinone, 6-[cyclohexyl[2-(dimethylamino)ethoxy]methyl]-3-ethyl- (CA INDEX NAME)



IT 855444-06-3P 855444-08-5P

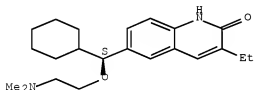
RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of cyclohexylalkyl quinolinone and quinoxalinone derivs. as poly(ADP-ribose) polymerase (PARP) inhibitors)

RN 855444-06-3 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(S)-cyclohexyl[2-(dimethylamino)ethoxy]methyl]-3-ethyl- (CA INDEX NAME)

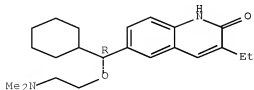
Absolute stereochemistry.



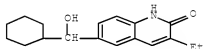
RN 855444-08-5 HCAPLUS

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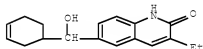
Absolute stereochemistry.



IT 855444-38-1P  
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (preparation of cyclohexylalkyl quinolinone and quinoxalinone derivs. as poly(ADP-ribose) polymerase (PARP) inhibitors)  
 RN 855444-38-1 HCAPLUS  
 CN 2(1H)-Quinolinone, 6-(cyclohexylhydroxymethyl)-3-ethyl- (CA INDEX NAME)



IT 854523-93-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of cyclohexylalkyl quinolinone and quinoxalinone derivs. as poly(ADP-ribose) polymerase (PARP) inhibitors)  
 RN 854523-93-6 HCAPLUS  
 CN 2(1H)-Quinolinone, 6-(3-cyclohexen-1-ylhydroxymethyl)-3-ethyl- (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)  
 REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

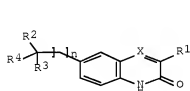
L14 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2005:523430 HCAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 143:60003  
 TITLE: Preparation of 6-substituted 2-quinolinones and 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors  
 INVENTOR(S): Mabire, Dominique Jean-Pierre; Guillemont, Jerome  
 Emile Georges; Van Dun, Jacobus Alphonsus Josephus;  
 Somers, Maria Victorina Francisca; Wouters, Walter  
 Boudewijn Leopold  
 PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.  
 SOURCE: PCT Int. Appl., 48 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005054210	A1	20050616	WO 2004-EP13164	20041118
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
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AU 2004295059	A1	20050616	AU 2004-295059	20041118
CA 2546657	A1	20050616	CA 2004-2546657	20041118
EP 1709012	A1	20061011	EP 2004-819602	20041118
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR, IS, YU			
CN 1890224	A	20070103	CN 2004-80035857	20041118
BR 2004016532	A	20070109	BR 2004-16532	20041118
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SG 151249	A1	20090430	SG 2009-1531	20041118
IN 2006DN03071	A	20070810	IN 2006-DN3071	20060529
US 20070129375	A1	20070607	US 2006-596086	20060530
MX 2006006255	A	20060809	MX 2006-6255	20060602
KR 2006118534	A	20061123	KR 2006-711234	20060608
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			WO 2004-EP13164	W 20041118

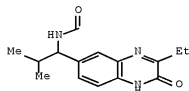
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 143:60003; MARPAT 143:60003

GI



I



II

AB The title compds. I [n = 0-2; X = N, CR5; R5 = H or taken together with R1 may form CH:CHCH:CH; R1 = alkyl, thienyl; R2 = H, OH, or taken together with R3 or R4 may form O; R3 = OH, OR8, SR9, etc.; R8 = alkyl, alkylcarbonyl, dialkylaminoalkyl; R9 = dialkylaminoalkyl; R4 = H, alkyl, furanyl, etc.; with the provision], useful for the treatment of a PARP mediated disorder, were prepared E.g., a multi-step synthesis of II, starting from 1-(4-amino-3-nitrophenyl)-2-methyl-1-propanone, was given. The exemplified compds. I were tested in an in vitro assay based on SPA technol. and in an in vitro filtration assay assessing PARP-1 activity (data given). The pharmaceutical composition comprising the compound I is disclosed.

IT 854523-79-8P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP

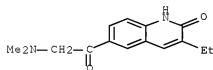


(Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of 6-substituted 2-quinolinones and 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors)

RN 854523-79-8 HCAPLUS

CN 2(1H)-Quinolinone, 6-[2-(dimethylamino)acetyl]-3-ethyl- (CA INDEX NAME)



IT 854523-77-6P 854523-81-2P 854523-83-4P

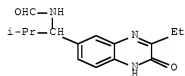
854523-93-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 6-substituted 2-quinolinones and 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors)

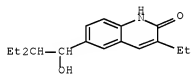
RN 854523-77-6 HCAPLUS

CN Formamide, N-[1-(3-ethyl-1,2-dihydro-2-oxo-6-quinoxaliny)-2-methylpropyl]- (CA INDEX NAME)



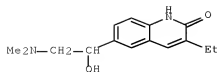
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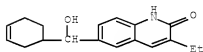


RN 854523-83-4 HCAPLUS

CN 2(1H)-Quinolinone, 6-[2-(dimethylamino)-1-hydroxyethyl]-3-ethyl- (CA INDEX NAME)



RN 854523-93-6 HCAPLUS  
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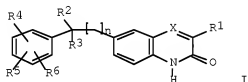


OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)  
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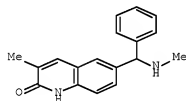
L14 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2010 ACS ON STN  
 ACCESSION NUMBER: 2005:523424 HCAPLUS Full-text  
 DOCUMENT NUMBER: 143:60001  
 TITLE: Preparation of 6-alkenyl and 6-phenylalkyl substituted 2-quinolinones and 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors  
 INVENTOR(S): Mabire, Dominique Jean-pierre; Guillemont, Jerome  
 Emile Georges; Van Dun, Jacobus Alphonsus Josephus;  
 Somers, Maria Victorina Francisca; Wouters, Walter  
 Boudewijn Leopold  
 PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.  
 SOURCE: PCT Int. Appl., 102 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005054201	A1	20050616	WO 2004-EP13163	20041118
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2004295058	A1	20050616	AU 2004-295058	20041118

CA 2546300	A1	20050616	CA 2004-2546300	20041118
EP 1687277	A1	20060809	EP 2004-819601	20041118
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
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CN 1882547	A	20061220	CN 2004-80034176	20041118
BR 2004016206	A	20061226	BR 2004-16206	20041118
JP 2007511574	T	20070510	JP 2006-540338	20041118
SG 150533	A1	20090330	SG 2009-1197	20041118
US 20070072842	A1	20070329	US 2006-595891	20060518
IN 2006DN02813	A	20070803	IN 2006-DN2813	20060518
MX 2006005687	A	20060817	MX 2006-5687	20060519
ZA 2006004075	A	20070926	ZA 2006-4075	20060519
KR 2006115393	A	20061108	KR 2006-710201	20060525
NO 2006002894	A	20060809	NO 2006-2894	20060620
PRIORITY APPLN. INFO.:				
			WO 2003-EP13028	A 20031120
			EP 2003-78860	A 20031205
			WO 2003-EP130	A 20031120
			WO 2004-EP13163	W 20041118
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT				
OTHER SOURCE(S): CASREACT 143:60001; MARPAT 143:60001				
GI				



I



II

AB The title compds. I [n = 0-2; X = N, CR7; R7 = H or taken together with R1 may form CH:CHCH:CH; R1 = alkyl, thiophenyl; R2 = H, OH, alkyl, alkynyl or taken together with R3 may form O; R3 = OH, OR10, SR11, etc.; R10, R11 = CHO, alkyl, (alkyl)amino, etc.; R4-R6 = H, halo, trihalomethyl, etc.; with the provision], useful for the treatment of a PARP mediated disorder, were prepared E.g., a multi-step synthesis of II, starting from bromobenzene and 3-methyl-6-quinolinecarboxaldehyde, was given. The exemplified compds. I were tested in an in vitro assay based on SPA technol. and in an in vitro filtration assay assessing PARP-1 activity (data given). The pharmaceutical composition comprising the compound I is disclosed.

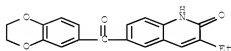
IT 854532-59-5P 854534-00-2P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of 6-alkenyl and 6-phenylalkyl substituted 2-quinolinones and

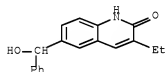
## 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors)

RN 854532-59-5 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(2,3-dihydro-1,4-benzodioxin-6-yl)carbonyl]-3-ethyl-  
(CA INDEX NAME)

RN 854534-00-2 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-(hydroxyphenylmethyl)- (CA INDEX NAME)



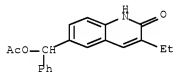
IT 854532-60-8P 854532-69-7P 854532-85-7P

854533-23-6P 854533-42-9P 854533-51-0P

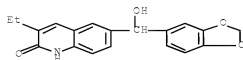
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
(Uses)(preparation of 6-alkenyl and 6-phenylalkyl substituted 2-quinolinones and  
2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors)

RN 854532-60-8 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(acetyloxy)phenylmethyl]-3-ethyl- (CA INDEX NAME)

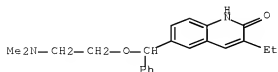


RN 854532-69-7 HCAPLUS

CN 2(1H)-Quinolinone, 6-(1,3-benzodioxol-5-ylhydroxymethyl)-3-ethyl-  
(CA INDEX NAME)

RN 854532-85-7 HCAPLUS

CN 2(1H)-Quinolinone, 6-[[2-(dimethylamino)ethoxy]phenylmethyl]-3-ethyl- (CA INDEX NAME)



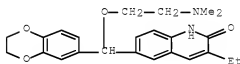
RN 854533-23-6 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(2,3-dihydro-1,4-benzodioxin-6-yl)[2-(dimethylamino)ethoxy]methyl]-3-ethyl-, ethanedioate (2:3) (CA INDEX NAME)

CM 1

CRN 854533-22-5

CMF C24 H28 N2 O4



CM 2

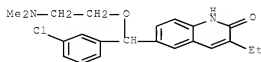
CRN 144-62-7

CMF C2 H2 O4



RN 854533-42-9 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(3-chlorophenyl)[2-(dimethylamino)ethoxy]methyl]-3-ethyl- (CA INDEX NAME)



RN 854533-51-0 HCAPLUS

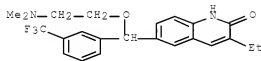
CN 2(1H)-Quinolinone, 6-[[2-(dimethylamino)ethoxy][3-(trifluoromethyl)phenyl]methyl]-3-ethyl-, ethanedioate (1:1) (CA INDEX NAME)

NAME)

CM 1

CRN 854533-50-9

CMF C23 H25 F3 N2 O2



CM 2

CRN 144-62-7

CMF C2 H2 O4



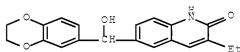
IT 854534-40-0P 854534-42-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 6-alkenyl and 6-phenylalkyl substituted 2-quinolinones and 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors)

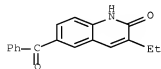
RN 854534-40-0 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(2,3-dihydro-1,4-benzodioxin-6-yl)hydroxymethyl]-3-ethyl- (CA INDEX NAME)



RN 854534-42-2 HCAPLUS

CN 2(1H)-Quinolinone, 6-benzoyl-3-ethyl- (CA INDEX NAME)



OS.CITING REF COUNT:

2

THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:80538 HCAPLUS Full-text

DOCUMENT NUMBER: 142:316680

TITLE: Synthesis, Structure-Activity Relationship, and Receptor Pharmacology of a New Series of Quinoline Derivatives Acting as Selective, Noncompetitive mGlu1 Antagonists

AUTHOR(S): Mabire, Dominique; Coupa, Sophie; Adelinet, Christophe; Poncelet, Alain; Simonnet, Yvan; Venet, Marc; Wouters, Ria; Lesage, Anne S. J.; Van Beijsterveldt, Ludy; Bischoff, Francois

CORPORATE SOURCE: Department of Medicinal Chemistry, Johnson & Johnson Pharmaceutical Research Development, Val de Reuil, F-27106, Fr.

SOURCE: Journal of Medicinal Chemistry (2005), 48(6), 2134-2153

CODEN: JMCMAR; ISSN: 0022-2623

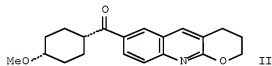
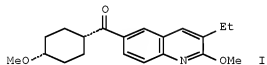
PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:316680

GI



AB Acyl-substituted quinolines and fused quinolines such as I and II are prepared as noncompetitive antagonists of the metabotropic glutamate receptor mGluR1; their activities in recombinant and human mGluR1 and the metabolic stabilities of some of the compds. in human liver microsomes are determined. Methoxycyclohexylcarbonylquinoline I is prepared and found to be a mGlu1 antagonist with an IC50 value of 20 nM for the rat mGlu1 receptor. Using I as a lead compound, other quinolines are prepared and tested for antagonism of mGluR1; cis-methoxycyclohexanecarbonylpyranquinoline II is found to antagonize human mGluR1 in a signal transduction-mediated assay with an IC50 value of 0.55 nM. 77% of a 30 µM solution of II is metabolized by human liver microsomes in 30 min.; analogous data for other quinolines are obtained.

IT 499340-70-1P

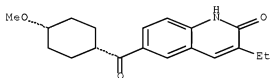
RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation, structure-activity relationships, and metabolic stabilities of quinolines and fused quinolines prepared as competitive antagonists for the metabotropic glutamate receptor mGluR1)

RN 409340-70-1 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.



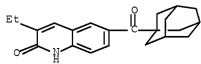
IT 409344-33-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation, structure-activity relationships, and metabolic stabilities of quinolines and fused quinolines prepared as competitive antagonists for the metabotropic glutamate receptor mGluR1)

RN 409344-33-8 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-(tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylcarbonyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 27 THERE ARE 27 CAPLUS RECORDS THAT CITE THIS RECORD (27 CITINGS)

REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2003:796538 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 139:323440

TITLE: Preparation of radiolabeled quinolines and quinolinones as metabotropic glutamate receptor mGluR1 antagonists for use in positron emission tomography.

INVENTOR(S): Lesage, Anne Simone Josephine; Bischoff, Francois Paul; Janssen, Cornelus Gerardus Maria; Lavreysen, Hilde

PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.

SOURCE: PCT Int. Appl., 148 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:



PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003082350	A2	20031009	WO 2003-EP3240	20030326
WO 2003082350	A3	20040304		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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AU 2003226737	A1	20031013	AU 2003-226737	20030326
AU 2003226737	B2	20080904		
BR 2003008945	A	20050104	BR 2003-8945	20030326
EP 1492571	A2	20050105	EP 2003-745282	20030326
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CN 1642580	A	20050720	CN 2003-807387	20030326
JP 2005524679	T	20050818	JP 2003-579882	20030326
NZ 535438	A	20060831	NZ 2003-535438	20030326
IN 2004DN02631	A	20050401	IN 2004-DN2631	20040908
US 20060083676	A1	20060420	US 2004-509069	20040924
US 7517517	B2	20090414		
MX 2004009435	A	20050125	MX 2004-9435	20040928
ZA 2004007820	A	20051011	ZA 2004-7820	20040928
NO 2004004635	A	20041027	NO 2004-4635	20041027

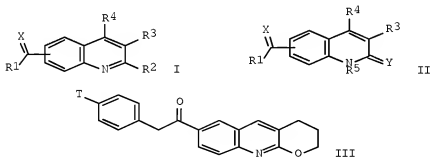
PRIORITY APPLN. INFO.:

EP 2002-76254  
WO 2003-EP3240A 20020329  
W 20030326

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 139:323440

GI



AB Radiolabeled title compds. [I, II; X = O, S, C(R<sub>6</sub>)<sub>2</sub>, NR<sub>7</sub>; Y = O, S; R<sub>1</sub> = (substituted) alkyl, cycloalkyl, cycloalkylalkyl, thienyl, quinolinyl, etc.; R<sub>2</sub> = H, halo, cyano, alkyl, amino, heterocyclyl, etc.; R<sub>3</sub>, R<sub>4</sub> = H, halo, OH, cyano, alkyl, alkoxy, etc.; R<sub>2</sub>R<sub>3</sub> = (CH<sub>2</sub>)<sub>3-6</sub>, Z<sub>4</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>, Z<sub>4</sub>CH<sub>2</sub>CH<sub>2</sub>, etc.; Z<sub>4</sub> = O, S, SO<sub>2</sub>, NR<sub>11</sub>; R<sub>11</sub> = H, alkyl, PhCH<sub>2</sub>, alkoxy carbonyl; R<sub>3</sub>R<sub>4</sub> = (CH<sub>2</sub>)<sub>4</sub>, CH:CHCH:CH; R<sub>5</sub> = H, cycloalkyl, piperidinyl, oxothienyl, tetrahydrothienyl, aralkyl, alkoxyalkyl, etc.;

R6 = H, aryl, alkyl, aminoalkyl; R7 = amino, OH], were prepared. Most preferred are radiolabeled compds. in which the radioactive isotope is selected from  $^3\text{H}$ ,  $^{11}\text{C}$  and  $^{18}\text{F}$ . The invention also relates to their use in a diagnostic method, in particular for marking and identifying a mGluR1 receptor in biol. material, as well as to their use for imaging an organ, in particular using positron emission tomog. (PET). Thus, title compound (III) was prepared by tritiation of the corresponding bromide in THF using tritium gas and Pd/C catalyst. The purified product showed specific activity of 25 Ci/mmol.

IT	409340-69-8P	409340-70-1P	409341-02-2P
	409344-31-6P	409344-32-7P	409344-33-8P
	409344-34-9P	409344-35-0P	409344-36-1P
	409344-37-2P	409344-38-3P	409344-39-4P
	409344-45-2P	409344-50-9P	409344-62-3P
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	409345-52-4P		

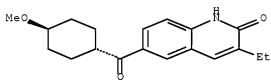
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of radiolabeled quinolines and quinolinones as metabotropic glutamate receptor mGluR1 antagonists for use in positron emission tomog.)

RN 409340-69-8 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(trans-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

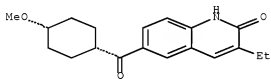
Relative stereochemistry.



RN 409340-70-1 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

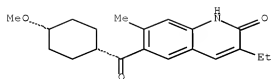
Relative stereochemistry.



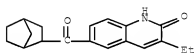
RN 409341-02-2 HCAPLUS

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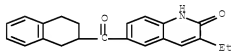
Relative stereochemistry.



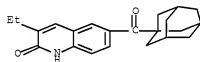
RN 409344-31-6 HCAPLUS  
 CN 2(1H)-Quinolinone, 6-(bicyclo[2.2.1]hept-2-ylcarbonyl)-3-ethyl- (CA INDEX NAME)



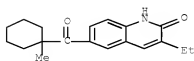
RN 409344-32-7 HCAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-[(1,2,3,4-tetrahydro-2-naphthalenyl)carbonyl]- (CA INDEX NAME)



RN 409344-33-8 HCAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-(tricyclo[3.3.1.1.3,7]dec-1-ylcarbonyl)- (CA INDEX NAME)

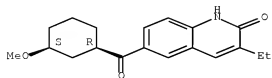


RN 409344-34-9 HCAPLUS  
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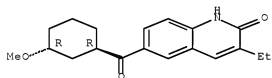
RN 409344-35-0 HCAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-[[ (1R,3S)-3-methoxycyclohexyl]carbonyl]-,  
 rel- (CA INDEX NAME)

Relative stereochemistry.

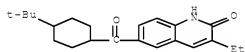


RN 409344-36-1 HCAPLUS  
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 rel- (CA INDEX NAME)

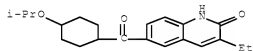
Relative stereochemistry.



RN 409344-37-2 HCAPLUS  
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 (CA INDEX NAME)

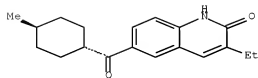


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 (CA INDEX NAME)



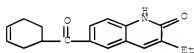
RN 409344-39-4 HCAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-[(trans-4-methylcyclohexyl)carbonyl]- (CA  
 INDEX NAME)

Relative stereochemistry.



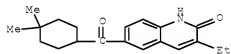
RN 409344-45-2 HCAPLUS

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RN 409344-50-9 HCAPLUS

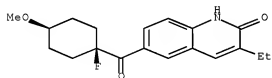
CN 2(1H)-Quinolinone, 6-[(4,4-dimethylcyclohexyl)carbonyl]-3-ethyl- (CA INDEX NAME)



RN 409344-62-3 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-1-fluoro-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

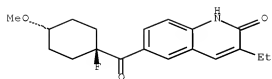
Relative stereochemistry.



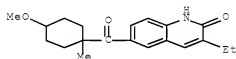
RN 409344-64-5 HCAPLUS

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Relative stereochemistry.

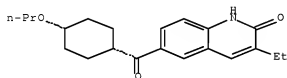


RN 409344-66-7 HCAPLUS  
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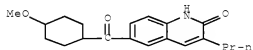


RN 409344-72-5 HCAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-4-propoxycyclohexyl)carbonyl]- (CA  
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Relative stereochemistry.

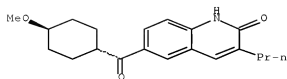


RN 409344-83-8 HCAPLUS  
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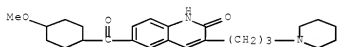
RN 409344-85-0 HCAPLUS  
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Relative stereochemistry.



RN 409345-13-7 HCAPLUS

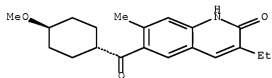
CN 2(1H)-Quinolinone, 6-[(4-methoxycyclohexyl)carbonyl]-3-[3-(1-piperidinyl)propyl]- (CA INDEX NAME)



RN 409345-52-4 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(trans-4-methoxycyclohexyl)carbonyl]-7-methyl- (CA INDEX NAME)

Relative stereochemistry.



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:275968 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 136:309857

TITLE: Preparation of quinolines and quinolinones as metabotropic glutamate receptor antagonists

INVENTOR(S): Mabire, Dominique Jean-Pierre; Venet, Marc Gaston; Coupa, Sophie; Poncelet, Alain Philippe; Lesage, Anne Simone Josephine

PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.

SOURCE: PCT Int. Appl., 114 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002028837	A1	20020411	WO 2001-EP11135	20010925

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2421782	A1	20020411	CA 2001-2421782	20010925
AU 2001093847	A	20020415	AU 2001-93847	20010925
BR 2001014253	A	20030701	BR 2001-14253	20010925
EP 1332133	A1	20030806	EP 2001-974298	20010925
EP 1332133	B1	20080709		
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HU 2003002167	A2	20031028	HU 2003-2167	20010925
JP 2004510764	T	20040408	JP 2002-532423	20010925
NZ 524945	A	20050128	NZ 2001-524945	20010925
EE 200300126	A	20050415	EE 2003-126	20010925
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CN 1703403	A	20051130	CN 2001-816717	20010925
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NO 325079	B1	20080128		
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US 20040082592	A1	20040429	US 2003-381987	20030814
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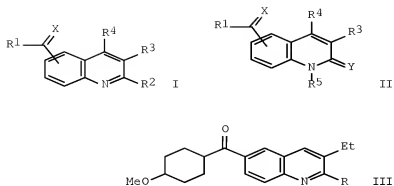
PRIORITY APPLN. INFO.:

EP 2000-203419	A	20001002
WO 2001-EP11135	W	20010925
US 2003-381987	A3	20030814

OTHER SOURCE(S): MARPAT 136:309857

GI





AB The title compds. [I or II; X = O, C(R<sub>6</sub>)<sub>2</sub>; (wherein R<sub>6</sub> = H, aryl, alkyl, etc.); R<sub>1</sub> = alkyl, aryl, thienyl, etc.; R<sub>2</sub> = H, halo, CN, etc.; R<sub>3</sub>, R<sub>4</sub> = H, alkyl; or R<sub>2</sub> and R<sub>3</sub> may be taken together to form (CH<sub>2</sub>)<sub>3</sub>, (CH<sub>2</sub>)<sub>4</sub>, CH:CHCH:CH, etc.; or R<sub>3</sub> and R<sub>4</sub> may be taken together to form CH:CHCH:CH, (CH<sub>2</sub>)<sub>4</sub>; R<sub>5</sub> = H, cycloalkyl, piperidinyl, etc.; Y = O, S; or Y and R<sub>5</sub> may be taken together to form CH:NN, N:NN, NCH:CH], useful for treating or preventing glutamate-induced diseases of the central nervous system, were prepared. Thus, reacting cis-III [R = Cl] with SnMe<sub>4</sub> in the presence of Pg(PPh<sub>3</sub>)<sub>4</sub> in PhMe afforded 17% cis-III [R = Me] which showed antagonism at a dose of 2.5 mg/kg bodyweight in cold allodynia test in rats with a Bennett ligation.

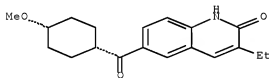
IT 409340-70-1P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(preparation of quinolines and quinolinones as metabotropic glutamate receptor antagonists)

RN 409340-70-1 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.

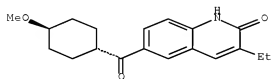


IT	409340-69-8P	409341-02-2P	409344-31-6P
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	409344-38-3P	409344-39-4P	409344-45-2P
	409344-50-9P	409344-62-3P	409344-64-5P
	409344-66-7P	409344-72-5P	409344-83-8P
	409344-85-0P	409345-13-7P	409345-52-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of quinolines and quinolinones as metabotropic glutamate receptor antagonists)

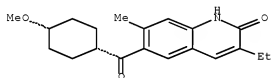
RN 409340-69-8 HCAPLUS  
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Relative stereochemistry.

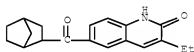


RN 409341-02-2 HCAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-4-methoxycyclohexyl)carbonyl]-7-methyl- (CA INDEX NAME)

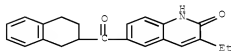
Relative stereochemistry.



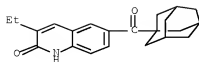
RN 409344-31-6 HCAPLUS  
 CN 2(1H)-Quinolinone, 6-(bicyclo[2.2.1]hept-2-ylcarbonyl)-3-ethyl- (CA INDEX NAME)



RN 409344-32-7 HCAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-[(1,2,3,4-tetrahydro-2-naphthalenyl)carbonyl]- (CA INDEX NAME)

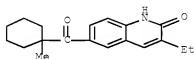


RN 409344-33-8 HCAPLUS  
 CN 2(1H)-Quinolinone, 3-ethyl-6-(tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylcarbonyl)- (CA INDEX NAME)



RN 409344-34-9 HCAPLUS

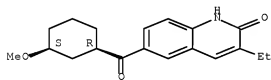
CN 2(1H)-Quinolinone, 3-ethyl-6-[(1-methylcyclohexyl)carbonyl]- (CA INDEX NAME)



RN 409344-35-0 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(1R,3S)-3-methoxycyclohexylcarbonyl]-, rel- (CA INDEX NAME)

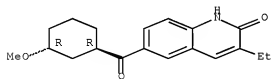
Relative stereochemistry.



RN 409344-36-1 HCAPLUS

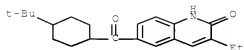
CN 2(1H)-Quinolinone, 3-ethyl-6-[(1R,3R)-3-methoxycyclohexylcarbonyl]-, rel- (CA INDEX NAME)

Relative stereochemistry.

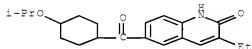


RN 409344-37-2 HCAPLUS

CN 2(1H)-Quinolinone, 6-[[4-(1,1-dimethylethyl)cyclohexylcarbonyl]-3-ethyl]- (CA INDEX NAME)



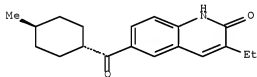
RN 409344-38-3 HCAPLUS

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(CA INDEX NAME)

RN 409344-39-4 HCAPLUS

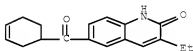
CN 2(1H)-Quinolinone, 3-ethyl-6-[(trans-4-methylcyclohexyl)carbonyl]-  
(CA INDEX NAME)

Relative stereochemistry.

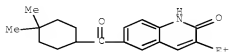


RN 409344-45-2 HCAPLUS

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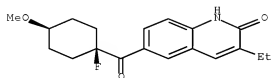
RN 409344-50-9 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(4,4-dimethylcyclohexyl)carbonyl]-3-ethyl- (CA  
INDEX NAME)

RN 409344-62-3 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-1-fluoro-4-methoxycyclohexyl)carbonyl]-  
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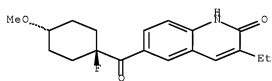
Relative stereochemistry.



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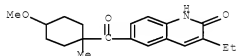
CN 2(1H)-Quinolinone, 3-ethyl-6-[(trans-1-fluoro-4-methoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.



RN 409344-66-7 HCAPLUS

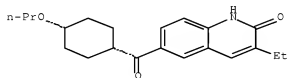
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(CA INDEX NAME)



RN 409344-72-5 HCAPLUS

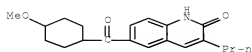
CN 2(1H)-Quinolinone, 3-ethyl-6-[(cis-4-propoxycyclohexyl)carbonyl]- (CA INDEX NAME)

Relative stereochemistry.



RN 409344-83-8 HCAPLUS

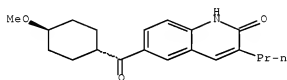
CN 2(1H)-Quinolinone, 6-[(4-methoxycyclohexyl)carbonyl]-3-propyl- (CA INDEX NAME)



RN 409344-85-0 HCAPLUS

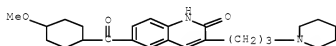
CN 2(1H)-Quinolinone, 6-[(trans-4-methoxycyclohexyl)carbonyl]-3-propyl- (CA INDEX NAME)

Relative stereochemistry.



RN 409345-13-7 HCAPLUS

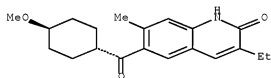
CN 2(1H)-Quinolinone, 6-[(4-methoxycyclohexyl)carbonyl]-3-[3-(1-piperidinyl)propyl]- (CA INDEX NAME)



RN 409345-52-4 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[(trans-4-methoxycyclohexyl)carbonyl]-7-methyl- (CA INDEX NAME)

Relative stereochemistry.



OS.CITING REF COUNT: 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:527827 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 134:162992

TITLE: Synthesis and antimicrobial activities of some novel quinoxalinone derivatives

AUTHOR(S): Ali, M. M.; Ismail, M. M. F.; El-Gaby, M. S. A.;  
Zahran, M. A.; Ammar, Y. A.  
CORPORATE SOURCE: Dep. of Chemistry, Faculty of Science, Al-Azhar Univ.,  
Cairo, 11884, Egypt  
SOURCE: Molecules [online computer file] (2000), 5(6), 864-873  
CODEN: MOLEFW; ISSN: 1420-3049  
URL: <http://www.mdpi.org/molecules/papers/50600864.pdf>  
PUBLISHER: Molecular Diversity Preservation International  
DOCUMENT TYPE: Journal; (online computer file)  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 134:162992  
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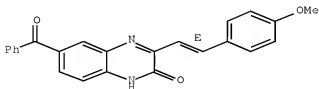


AB Condensation of 4-benzoyl-1,2-phenylenediamine with sodium pyruvate in acetic acid furnished two products, which were identified as 6-benzoyl- (I) and 7-benzoyl-3-methyl-2(1H)-quinoxalinone (II). Fusion of I with aromatic aldehydes furnished the styryl derivs. Alkylation of I and II with di-Me sulfate or Et chloroacetate produced the N-alkyl derivs. Hydrazinolysis of one ester derivative with hydrazine hydrate afforded the hydrazone derivative, which underwent condensation with aldehydes to give the corresponding hydrazone derivs. In addition, chlorination of I with thionyl chloride afforded the 2-chloro derivative, which was subjected to reaction with sodium azide and n-butylamine to yield the corresponding tetrazolo (III) and n-butylamino (IV) derivs., resp. The structures of the compds. prepared were confirmed by anal. and spectral data. Also, some of the synthesized compds. were screened for antimicrobial activity.

IT 325469-54-3P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation and antimicrobial activities of quinoxalinone derivs.)

RN 325469-54-3 HCAPLUS  
CN 2(1H)-Quinoxalinone, 6-benzoyl-3-[(1E)-2-(4-methoxyphenyl)ethenyl]- (CA INDEX NAME)

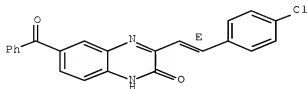
Double bond geometry as shown.



IT 325469-53-2P 325469-55-4P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and antimicrobial activities of quinoxalinone derivs.)

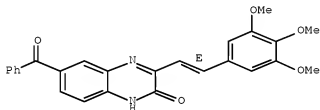
RN 325469-53-2 HCAPLUS  
 CN 2(1H)-Quinoxalinone, 6-benzoyl-3-[(1E)-2-(4-chlorophenyl)ethenyl]- (CA  
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Double bond geometry as shown.



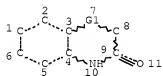
RN 325469-55-4 HCAPLUS  
 CN 2(1H)-Quinoxalinone, 6-benzoyl-3-[(1E)-2-(3,4,5-trimethoxyphenyl)ethenyl]-  
 (CA INDEX NAME)

Double bond geometry as shown.



OS.CITING REF COUNT: 39 THERE ARE 39 CAPLUS RECORDS THAT CITE THIS  
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 REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS  
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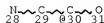
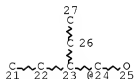
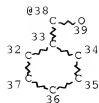
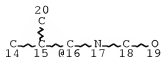
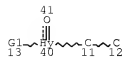
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 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
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 NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE



L3 127284 SEA FILE=REGISTRY SSS FUL L1  
 L6 STR



VAR G1=16/24/30/38

NODE ATTRIBUTES:

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DEFAULT ECLEVEL IS LIMITED

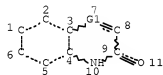
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 31

STEREO ATTRIBUTES: NONE

L9 STR



VAR G1=CH/N

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

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GRAPH ATTRIBUTES:

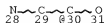
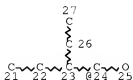
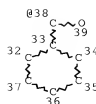
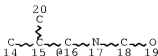
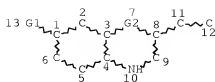
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE

L11 87 SEA FILE=REGISTRY SUB=L3 SSS FUL L6 AND L9

L12 STR



VAR G1=16/24/30/38  
 VAR G2=CH/N  
 NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 39

STEREO ATTRIBUTES: NONE  
 L13 48 SEA FILE=REGISTRY SUB=L11 SSS FUL L12  
 L14 8 SEA FILE=HCAPLUS ABB=ON PLU=ON L13  
 L15 39 SEA FILE=REGISTRY ABB=ON PLU=ON L11 NOT L13  
 L16 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L15  
 L17 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L16 NOT L14

=> d ibib abs hitstr l17 1-5

L17 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2009:1501809 HCAPLUS Full-text  
 DOCUMENT NUMBER: 152:12347  
 TITLE: Spiro[pyrazolopyran-piperidine] ketones as acetyl-CoA  
 carboxylase inhibitors and their preparation,  
 pharmaceutical compositions and use in the treatment  
 of diseases  
 INVENTOR(S): Corbett, Jeffrey Wayne; Elliott, Richard Louis;  
 Freeman-Cook, Kevin Daniel; Griffith, David Andrew;  
 Phillion, Dennis Paul  
 PATENT ASSIGNEE(S): Pfizer, Inc., USA  
 SOURCE: PCT Int. Appl., 147pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009144554	A1	20091203	WO 2009-IB5649	20090518

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:

US 2008-56652P

P 20080528

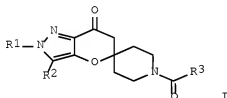
US 2008-58689P

P 20080604

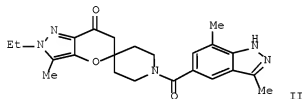
US 2009-171519P

P 20090422

GI



I



II

AB The invention provides compds. of formula I or a pharmaceutically acceptable salt of said compound, pharmaceutical compns. thereof; and the use thereof in treating diseases, conditions or disorders modulated by the inhibition of acetyl-CoA carboxylase enzyme(s) in an animal. Compds. of formula I wherein R1 is C1-4 alkyl, C3-6 cycloalkyl, tetrahydrofuranlyl, Bn, etc.; R2 is H, Me and Et; R3 is (un)substituted benzazole, (un)substituted quinolinyl, (un)substituted naphthyl, etc.; and pharmaceutically acceptable salts thereof, are claimed. Example compound II was prepared by a general procedure (procedure given). All the invention compds. were evaluated for their acetyl-CoA carboxylase inhibitory activity. From the assay, it was determined that compound II exhibited IC50 values in the range of 9 - 11 nM.

II 1197942-50-9P 1197942-52-1P

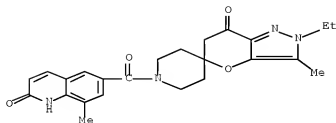
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of spiro[pyrazolopyran-piperidine] ketones as acetyl-CoA carboxylase inhibitors useful in the treatment of acetyl-CoA carboxylase-mediated diseases)

RN 1197942-50-9 HCAPLUS

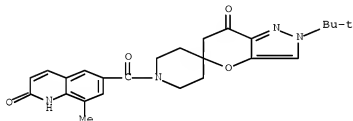
CN Spiro[piperidine-4,5'-(7'H)-pyrano[3,2-c]pyrazol]-7'-one, 1-[(1,2-dihydro-8-methyl-2-oxo-6-quinolinyl)carbonyl]-2'-ethyl-2',6'-

dihydro-3'-methyl- (CA INDEX NAME)



RN 1197942-52-1 HCAPLUS

CN Spiro[piperidine-4,5'-(7'H)-pyrano[3,2-c]pyrazol]-7'-one,  
1-[(1,2-dihydro-8-methyl-2-oxo-6-quinolinyl)carbonyl]-2'-(1,1-dimethylethyl)-2',6'-dihydro- (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2009:247530 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 150:438012

TITLE: Virtual screening for Raf-1 kinase inhibitors based on  
pharmacophore model of substituted ureas

AUTHOR(S): Li, Hui-Fang; Lu, Tao; Zhu, Tian; Jiang, Yong-Jun;  
Rao, Sha-Sha; Hu, Li-Ye; Xin, Bo-Tao; Chen, Ya-Dong

CORPORATE SOURCE: Department of Organic Chemistry, China Pharmaceutical  
University, Nanjing, 210009, Peop. Rep. China

SOURCE: European Journal of Medicinal Chemistry (2009), 44(3),  
1240-1249

CODEN: EJMCA5; ISSN: 0223-5234

PUBLISHER: Elsevier Masson SAS

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A three-dimensional (3D) quant. pharmacophore model was developed from a training set of structurally diverse substituted ureas against Raf-1 kinase, which was well validated to be highly predictive by two methods, namely, test set prediction and Cat-Scramble method. Then a virtual database searching was performed with the pharmacophore model as a 3D query, and the bioactivities of the retrieved hits were predicted by the pharmacophore. Subsequently, mol. docking was carried out on the selected hits whose estimated IC<sub>50</sub> was less than 1  $\mu$ M. Finally, 29 hits were identified as potential leads against Raf-1 kinase, which exhibited good estimated

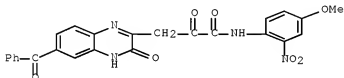
activities, high docking scores, similar binding mode to exptl. proven compds. and favorable drug-like properties. The study may facilitate the discovery and rational design of novel leads with potent inhibitory activity targeting Raf-1 kinase.

IT 883829-01-4, NCI 0648594

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(virtual screening for Raf-1 kinase inhibitors based on pharmacophore model of substituted ureas)

RN 883829-01-4 HCAPLUS

CN 2-Quinoxalinepropanamide, 6-benzoyl-3,4-dihydro-N-(4-methoxy-2-nitrophenyl)- $\alpha$ ,3-dioxo- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)  
REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2010 ACS ON STN

ACCESSION NUMBER: 2005:523429 HCAPLUS Full-text

DOCUMENT NUMBER: 143:60002

TITLE: Preparation of 7-phenylalkyl substituted 2-quinolinones and 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors

INVENTOR(S): Mabire, Dominique Jean-pierre; Guillemont, Jerome  
Emile Georges; Van Dun, Jacobus Alphonsus Josephus;  
Somers, Maria Victorina Francisca; Wouters, Walter  
Boudewijn Leopold

PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

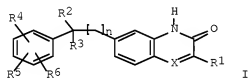
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005054209	A1	20050616	WO 2004-EP13162	20041118
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,				

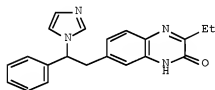
NE, SN, TD, TG

AU 2004295057	A1	20050616	AU 2004-295057	20041118
CA 2546002	A1	20050616	CA 2004-2546002	20041118
EP 1709011	A1	20061011	EP 2004-819600	20041118
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR, IS, YU				
CN 1882549	A	20061220	CN 2004-80034287	20041118
BR 2004016817	A	20070306	BR 2004-16817	20041118
JP 2007513087	T	20070524	JP 2006-540337	20041118
SG 150534	A1	20090330	SG 2009-1198	20041118
US 20080249099	A1	20081009	US 2006-595882	20060517
IN 2006DN02810	A	20070803	IN 2006-DN2810	20060518
MX 2006005686	A	20060817	MX 2006-5686	20060519
ZA 2006004076	A	20070926	ZA 2006-4076	20060519
KR 2006111532	A	20061027	KR 2006-710200	20060525
NO 2006002892	A	20060809	NO 2006-2892	20060620
PRIORITY APPLN. INFO.:			EP 2003-78650	A 20031120
			WO 2004-EP13162	W 20041118

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT  
OTHER SOURCE(S): CASREACT 143:60002; MARPAT 143:60002  
GI



I



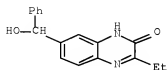
II

AB The title compds. I [n = 0-2; X = N, CR7; R7 = H or taken together with R1 may form CH:CHCH:CH; R1 = alkyl, thienyl; R2 = H, OH, alkyl, alkynyl or taken together with R3 may form O; R3 = OH, OR10, SR11, etc.; R10 = alkyl, alkylcarbonyl, dialkylaminoalkyl; R11 = dialkylaminoalkyl; R4-R6 = H, halo, trihalomethyl, etc.; with the provision], useful for the treatment of a PARP mediated disorder, were prepared E.g., a multi-step synthesis of II, starting from N-[4-(2-oxo-2-phenylethyl)phenyl]acetamide, was given. The exemplified compds. I were tested in an in vitro assay based on SPA technol. and in an in vitro filtration assay assessing PARP-1 activity (data given). The pharmaceutical composition comprising the compound I is disclosed.

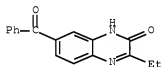
IT 854397-87-8P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(preparation of 7-phenylalkyl substituted 2-quinolinones and 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors)

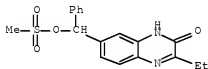
RN 854397-87-8 HCAPLUS  
 CN 2(1H)-Quinoxalinone, 3-ethyl-7-(hydroxyphenylmethyl)- (CA INDEX NAME)



IT 854398-62-2P 854398-71-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation of 7-phenylalkyl substituted 2-quinolinones and  
 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors)  
 RN 854398-62-2 HCAPLUS  
 CN 2(1H)-Quinoxalinone, 7-benzoyl-3-ethyl- (CA INDEX NAME)



RN 854398-71-3 HCAPLUS  
 CN 2(1H)-Quinoxalinone, 3-ethyl-7-[(methanesulfonyl)oxy]phenylmethyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
 (3 CITINGS)  
 REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1990:612014 HCAPLUS Full-text  
 DOCUMENT NUMBER: 113:212014  
 ORIGINAL REFERENCE NO.: 113:35835a,35838a  
 TITLE: Preparation of (1H-azol-1-ylmethyl)quinolines,  
 -quinazolines, and -quinoxalines as drugs  
 INVENTOR(S): Freyne, Eddy Jean Edgard; Venet, Marc Gaston;  
 Raeymaekers, Alfons Herman Margaretha; Sanz, Gerard  
 Charles  
 PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.

SOURCE: Eur. Pat. Appl., 106 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 371564	A2	19900606	EP 1989-203014	19891128
EP 371564	A3	19910529		
EP 371564	B1	19950712		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 5028606	A	19910702	US 1989-434957	19891113
US 5037829	A	19910806	US 1989-435120	19891113
CA 2002864	A1	19900529	CA 1989-2002864	19891114
CA 2002864	C	19991116		
DK 8905994	A	19900530	DK 1989-5994	19891128
DK 172748	B1	19990628		
NO 8904734	A	19900530	NO 1989-4734	19891128
NO 174509	B	19940207		
NO 174509	C	19940518		
AU 8945646	A	19900607	AU 1989-45646	19891128
AU 620946	B2	19920227		
HU 52498	A2	19900728	HU 1989-6220	19891128
HU 205106	B	19920330		
ZA 8909076	A	19910731	ZA 1989-9076	19891128
SU 1780536	A3	19921207	SU 1989-4742543	19891128
IL 92486	A	19930708	IL 1989-92486	19891128
ES 2088889	T3	19961001	ES 1989-203014	19891128
FI 101964	B	19980930	FI 1989-5687	19891128
FI 101964	B1	19980930		
CN 1042912	A	19900613	CN 1989-108925	19891129
CN 1033752	C	19970108		
JP 02223579	A	19900905	JP 1989-307793	19891129
JP 2916181	B2	19990705		
US 5151421	A	19920929	US 1991-672298	19910320
US 5185346	A	19930209	US 1991-704746	19910523
US 5268380	A	19931207	US 1992-973871	19921110
US 5441954	A	19950815	US 1993-131817	19931005
CN 1106004	A	19950802	CN 1994-117801	19941102
CN 1036002	C	19971001		
CN 1106005	A	19950802	CN 1994-117802	19941102
CN 1036003	C	19971001		
US 5612354	A	19970318	US 1995-409551	19950323
PRIORITY APPLN. INFO.:				
			GB 1988-27820	A 19881129
			GB 1988-27821	A 19881129
			GB 1988-27822	A 19881129
			US 1989-434205	B2 19891113
			US 1989-434957	A3 19891113
			US 1991-704746	A3 19910523
			US 1992-973871	A3 19921110
			US 1993-131817	A3 19931005

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 113:212014

GI For diagram(s), see printed CA Issue.

AB The title compds. [I; R = H, alkyl; X1:X2 = CH:CH, CH:N, N:CH; Y = H, alkyl, cycloalkyl, alkenyl, alkynyl, (un)substituted aryl, aralkyl; Z = (un)substituted



(oxo)quinolinyl, (oxo- or thioxo)quinazolinyl, (oxo- or dioxo)quinoxalinyl] were prepared as retinoic acid metabolism inhibitors, aromatase inhibitors, etc. Thus, 3,4-dihydroquinolin-2(1H)-one was stirred 2 h at 70° with BzCl in DMF containing AlCl<sub>3</sub> and the product reduced by NaBH<sub>4</sub> to give hydroxymethylquinolinone II (R<sub>1</sub> = Ph, R<sub>2</sub> = OH). II (R<sub>1</sub> = Me, R<sub>2</sub> = OH) was stirred overnight with SOCl<sub>2</sub> in THF and the product II (R<sub>1</sub> = Me, R<sub>2</sub> = Cl) stirred overnight at 60-70° with 1H-imidazole in DMSO to give II (R<sub>1</sub> = Me, R<sub>2</sub> = imidazo) which maintained plasma levels of i.v. administered all-trans-retinoic acid at ≥10 ng/mL in rats 2 h after oral administration of 40 mg/kg.

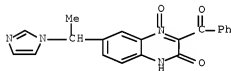
IT 130347-04-5P 130347-06-7P 130347-14-7P  
130347-20-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as retinoate metabolism and aromatase inhibitor)

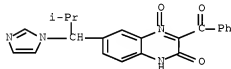
RN 130347-04-5 HCAPLUS

CN 2(1H)-Quinoxalinone, 3-benzoyl-6-[1-(1H-imidazol-1-yl)ethyl]-, 4-oxide  
(CA INDEX NAME)



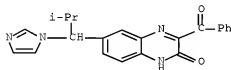
RN 130347-06-7 HCAPLUS

CN 2(1H)-Quinoxalinone, 3-benzoyl-6-[1-(1H-imidazol-1-yl)-2-methylpropyl]-, 4-oxide (CA INDEX NAME)



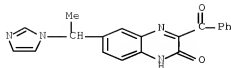
RN 130347-14-7 HCAPLUS

CN 2(1H)-Quinoxalinone, 3-benzoyl-6-[1-(1H-imidazol-1-yl)-2-methylpropyl]-  
(CA INDEX NAME)



RN 130347-20-5 HCAPLUS

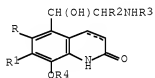
CN 2(1H)-Quinoxalinone, 3-benzoyl-6-[1-(1H-imidazol-1-yl)ethyl]- (CA INDEX NAME)



OS.CITING REF COUNT: 24 THERE ARE 24 CAPLUS RECORDS THAT CITE THIS  
RECORD (43 CITINGS)

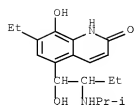
L17 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1978:152450 HCAPLUS Full-text  
 DOCUMENT NUMBER: 88:152450  
 ORIGINAL REFERENCE NO.: 88:24021a,24024a  
 TITLE: Carbostyryl derivatives  
 INVENTOR(S): Yoshizaki, Shiro; Sakano, Kazuhisa; Ishikawa, Hiroshi;  
 Nakagawa, Kazuyuki  
 PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 53005175	A	19780118	JP 1976-58040	19760519
JP 59036621	B	19840905		
PRIORITY APPLN. INFO.: GI			JP 1976-58040	A 19760519



AB Eighteen carbostyryl derivs. I (R, R1 = H, halo, NO2, NH2, OH, SO3H, cyano, alkyl, F3C, CO2H; both R and R1 are not H; R2, R3, R4 = H, alkyl) were prepared by proper chemical reactions of I (R = R1 = H). I were evaluated for their  $\beta$ -adrenergic nerve-stimulating activity with isolated guinea pig bronchi and atria. Thus, 0.14 g Cl in AcOH was added to 0.58 g 8-hydroxy-5-(2-isopropylamino-1-hydroxybutyl)carbostyryl in AcOH-CCl4 at  $-5^\circ$  to  $0^\circ$  and the mixture stirred 1 h to give 0.53 g 7-chloro-8-hydroxy-5-(2-isopropylamino-1-hydroxybutyl)carbostyryl HCl.

IT 66283-41-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 66283-41-8 HCAPLUS  
 CN 2(1H)-Quinolinone, 7-ethyl-8-hydroxy-5-[1-hydroxy-2-[(1-methylethyl)amino]butyl]-, hydrobromide (1:1) (CA INDEX NAME)



=>

=> d his nofile

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FILE 'REGISTRY' ENTERED AT 14:36:20 ON 05 JAN 2010
L1      STR
L3      127284 SEA SSS FUL L1
L6      STR
L9      STR
L11     87 SEA SUB=L3 SSS FUL L6 AND L9
L12     STR
L13     48 SEA SUB=L11 SSS FUL L12

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FILE 'HCAPLUS' ENTERED AT 14:44:45 ON 05 JAN 2010
L14     8 SEA ABB=ON PLU=ON L13
        D STAT QUE L14
        D IBIB ABS HITSTR L14 1-8

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FILE 'REGISTRY' ENTERED AT 14:48:43 ON 05 JAN 2010
L15     39 SEA ABB=ON PLU=ON L11 NOT L13

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FILE 'HCAPLUS' ENTERED AT 14:48:48 ON 05 JAN 2010
L16     5 SEA ABB=ON PLU=ON L15
L17     5 SEA ABB=ON PLU=ON L16 NOT L14
        D STAT QUE L17
        D IBIB ABS HITSTR L17 1-5

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